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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,518	11/19/2003	Kiyoshi Adachi	009683-484	4690
21839	7590	02/21/2006	EXAMINER	
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			LE, NHAN T	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/715,518	Applicant(s) ADACHI ET AL.	
	Examiner Nhan T. Le	Art Unit 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/19/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Devensky et al (US 4,617,678) in view of Vandegraaf (US 5,450,622).

As to claim 1, Devensky teaches a communication device for performing communication using a first (see fig. 1, number 33, col. 4, lines 7-25) and second clock signals (see fig. 1, number 39, col. 4, lines 7-25) complementary to each other, comprising: a squelch detection circuit for determining the communication device as being in a data communication state to output a first signal when said received first and second clock signals have a potential amplitude larger than a predetermined value (see fig. 1, number 49, col. 4, lines 7-25), and for determining the communication device as being in a non data communication state to output a second signal when said first and second clock signals have a potential amplitude not more than said predetermined value (see fig. 1, number 49, col. 4, lines 7-25). Devensky fails to teach an initialization circuit for initializing said communication device when the second signal is outputted from said squelch detection circuit. Vandegraaf teaches an initialization circuit for initializing said communication device when the second signal is outputted from said squelch detection circuit (see col. 5, lines 52-68, col. 6, lines 1-16). Therefore, it would

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have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Vandegraaf into the system of Devensky in order to minimize integration time and increase the sensitivity of the squelch (as suggested by Vandegraaf col. 3, lines 21-34).

Allowable Subject Matter

Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 2, the applied reference fails to teach a receiver for regenerating a data signal on the basis of said received first and second clock signals, wherein said receiver includes: first and second capacitors having electrodes receiving said first and second clock signals, respectively; and a differential amplification circuit including first and second transistors having gates connected to another electrodes of said first and second capacitors and having first electrodes connected to each other, respectively, and amplifying the potential difference in the gates of said first and second transistors, and said initialization circuit sets the potentials of the gates of said first and second transistors to predetermined potentials when the second signal is outputted from said squelch detection circuit as cited in the claim.

As to claim 3, the applied reference fails to teach said initialization circuit sets said control voltage to a predetermined value when the second signal is outputted from said squelch detection circuit as cited in the claim.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tao et al (US 6,759,838) teaches PLL with dual mode phase/frequency detection.

O'Brien (US 3,974,336) teaches speech processing system.

Eglit (US 6,320,574) teaches circuit and method for generating pixel data elements from analog image data and associated synchronization signals.

Aoki (US 20020005763) teaches mode control of PLL circuit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Le whose telephone number is 571-272-7892. The examiner can normally be reached on 08:00-05:00 (Mon-Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nrle

Nguyen Vo
2-14-2006

NGUYEN T. VO
PRIMARY EXAMINER